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CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

# CONSUMPTION AND DIGESTIBILITY OF SUPPLEMENTED CROSSBREAD COWS WITH DIFFERENT BIODIESEL CO-PRODUCTS

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The objective of this work was to evaluate the intake and digestibility of crossbred lactating cows kept in *Panicum maximum* cv. Tanzania supplemented with protein sources originating from co-products of the biodiesel industry. The experiment was carried out between February and May 2016, at the Paulista Agribusiness Agency (APTA), in the municipality of Colina / SP. 12 crossbred Holstein x Zebu cows, averaging 20 liters of day-1 milk, were grouped into four groups of three animals and distributed in a 4 x 4 quadrilateral experimental design with four replicates, where each group received after the morning and late milk concentrate feed with approximately 12% CP, differentiating only the protein ingredient, which were: soybean meal, peanut meal, cottonseed meal and sunflower meal. The amount of feed supplied was regulated according to the individual production, since for each 2.5 liters of milk the animals received 1 kg of feed. In this way, dairy control was done every day. The pasture was fertilized and had an area of 4.2 hectares, divided into 24 pickets with occupation of 24 hours. The experiment totaled 84 days, divided in 4 cycles of 21 days. Fecal production was estimated in each of the experimental animals using chromium oxide as an external marker. 10 g of Cr 2 O 3 were weighed in analytical balance and packed in water-soluble capsules. The marker was administered together with the feed daily at 7 and 16 hours, from the last 6 days of the adaptation period and during the first 4 days of the collection period. The faeces were collected directly in the rectum twice a day (8 and 17 hours) during the first 4 days of the collection period and were packed in plastic bags and stored in a freezer at -10ºC for further analysis of dry matter intake and digestibility, crude protein, ethereal extract, neutral detergent fiber, total carbohydrates, non-fibrous carbohydrates, and total digestible nutrients. There were no significant differences between the treatments, the food studied did not interfere in the consumption of the animals and had a similar digestibility. It is concluded that the use of co-products from the production of biodiesel can substitute traditional foods as they do not affect the consumption and the disgestibility of the animals.
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